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NOTES ON THE BIOLOGY OF CURICTA (HETEROPTERA),
Grace Olive Wiley

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Some Notes on the Biology of *Curicta** from Texas.

BY GRACE OLIVE WILEY.

BEHAVIOR OF ADULTS AND NYMPHS OF *CURICTA*.

I COLLECTED several pairs of adult *Curicta* and placed them all in one glass to take home alive. When I reached home most of them were mating. These were removed and placed in separate glasses, and remained paired for several hours.

In mating, the male takes a position to one side of the female, and usually to the right. If to the right, he hooks his left anterior tarsus over her head; if to the left, the right fore tarsus is used.

Both nymphs and adults seem fond of getting out of the water and lying close to the ground, where they are hardly discernible. I have found adults almost a foot from the water's edge, in tangled plant roots and under rotten pieces of wood. Search for eggs laid in nature provided fruitless. One pair was mating. I am half inclined to believe the eggs are laid in soft mud.†

The nymphs are very agreeable, in that they do not feed upon others of their kind, even when hungry. They like small notonectids, corixids, small carabids, fresh-water shrimp, and such. They refused small minnows, however. It is not uncommon to see three feeding quietly on one shrimp, or two feeding on one small beetle. They are very fond of mosquito larvæ.

EGGS.

Size. About 1.75 mm. long; width a trifle more than .75 mm.; diameter of crown a little less than ½ mm. Rosette of filaments at tip, numbering 15; length of filaments almost 1 mm.

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* *Curicta drakei* Hungerford.

† Have now found the eggs deposited in the tissue of dead plant stems with only the crown of filaments visible.

Shape. Elongate oval, one end slightly tapering and rounded, the other smaller, sloping somewhat obliquely and bearing a crown or rosette of fifteen long filaments.

Color. Creamy white, with filaments somewhat yellowish, center of crown darker.

Seven eggs were laid by one female twelve days after mating. These were not inserted in soft wood or in plant tissues, although both were available. The female was lying close to the wet sand and the eggs were laid on their sides on the sand without any regularity or order. The next day there were three more eggs, and in three more days I found six eggs hidden among the roots of water plants and in slimy accumulations in crotch of a dead twig.

DESCRIPTION OF FIRST-INSTAR NYMPH.

Form elongate oval; very much like adult, only broader in proportion to length. Head large, much narrower than prothorax and as wide as long, excluding the rostrum. Eyes globular, small.

Anterior femur quite robust and armed with a single median tooth, plainly visible and closer to the base than the apex of the femur.

Anterior coxæ about half the length of their femora, and very robust. Intermediate and posterior legs short. One-segmented tarsi.

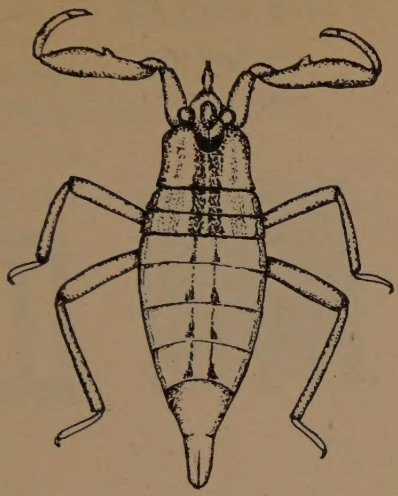
Color when first hatched pale straw yellow, becoming darker with brownish-black markings. Number of days of first instar, twelve. Entire length of insect from tip of beak to end of respiratory tube, 5 mm.; width across abdomen at widest part, 1.50 mm.; width across eyes, .75 mm.; width of shoulders at base of head, 1.15 mm.; length of prothorax on median line, 1 mm.; length of respiratory tube, a trifle more than .50 mm.; length of anterior femora, 1.40 mm., length of anterior tibiæ, .70 mm.; length of anterior tarsi about .25 mm.; length of anterior coxæ, .70 mm.; length of intermediate femora, 1.40 mm.; length of intermediate tibiæ, 1.00 mm.; length of intermediate tarsi, .20 mm.; length of posterior femora, 1.25 mm.; length of posterior tibiæ, almost 1.50 mm.; length of posterior tarsi, almost .50 mm.

Since writing the above I have reared the insect through from the beginning. There are five instars.

PLATE LIII.

The genus *Curicta* was represented in the United States by *Curicta howardi* Mont., described from a single specimen taken at Victoria, Tex., years ago. Nothing was known concerning the biology of these bugs. The sketch of the egg and first-instar nymph are therefore of interest.

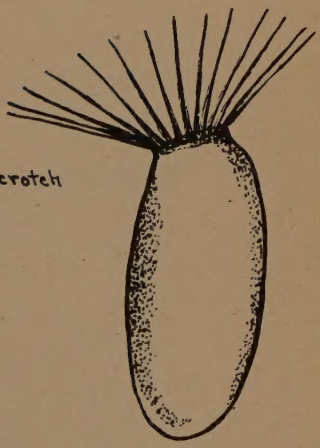
PLATE LIII.



1st. Instar Curicta howardi.

Egg laid in slimy accumulation in crotch of dead twig.

Egg hidden among grass roots, part of filiment visible.



Egg of Curicta.